

EXPLANATION
OF
CLR TRUNK CIRCUIT
ARR. FOR COIN CONTROL
H-61350

FEATURES

1. Extends pre-pay coin line subscribers to the toll board and provides toll grade transmission.
2. Refunds coins deposited to reach the toll operator.
3. Permits the operator to dispose of coins deposited as payment for the calls.
4. Provides peg count.

OPERATION

1. Signaling the Operator

When the wipers of a selector encounter the bank contacts associated with this circuit, battery thru relay C causes the selector to cut thru, which closes E over the subscriber's loop. Relay C operates from ground on lead C and closes K. Relay K operates and connects capacitors A and A1 to the repeat coil. Relay E operates over the subscriber's loop and closes B. Relay B operates, grounds lead C to hold C and the preceding equipment operated and to mark this trunk busy, and closes F and D. Relay D operates, grounds lead R.M. ST. to start the ringing equipment, connects A to the trunk to signal the operator, and connects R.B. TONE to the calling line to indicate that the operator has been signaled. Relay F operates and opens lead ATB.

2. Operator Answer (Operated: Relays B, C, D, F, E, and K)

When the operator answers, the circuit to A is closed over the trunk loop. Relay A operates and closes P. Relay P operates, removes lead R.B. TONE from the calling line, reverses battery polarity to the calling line causing the paystation equipment to clear the line of attachments, and connects #2M to lead PICKUP.

3. Automatic Coin Refund (Operated: Relays A, B, C, D, F, E, K, and P)

Leads PICKUP and INT. GRD. are grounded alternately. When ground is connected to lead PICKUP, relay M operates, opens C, and closes N. Relay N operates, short circuits the calling line, grounds lead ALM. GRD., and connects L to lead INT. GRD. Relay L operates for the

E-61350

W-61350

SIZE

CK.

APP'D.

ISSUE 1

0-16-38

0-4-E-

1350

lass C

hanged

ages 1

id 2

-20-61

REL

ISSUE 4

CK.	INDEX.	DATE:	SHEET 2	TOTAL 3
AUTOMATIC ELECTRIC COMPANY NORTHLAKE, ILL., U.S.A.				
A				

duration of ground on lead INT. GRD., and, when operated, connects -110V D.C. to the calling line thru J, and opens #1M. Relay J operates in series with the coin box equipment, reclosing #1M until the coin box equipment disposes of the coin. Relay M is slow to release in order to prevent its release in the interval between the operation of L and J. Interrupted -110V causes the coin box to refund the coins deposited. When the coins have been disposed, the paystation equipment opens J. Relay L operates and restores M which opens L and N. Relay L removes -110V D.C. from the calling line. Capacitor C is connected to the calling line to absorb surges due to the application of the coin control current. Relay N restores, removes the short circuit from the calling line, removes ground from lead ALM. GRD., and extends the calling line to the windings of E.

4. Coin Control (Operated: Relays A, B, D, E, F, K, and P)

The toll operator extends the connection for the calling subscriber as required. At some time during the course of the call, the operator disposes of the coins deposited in payment of the call by establishing a connection to this equipment either over a special coin control trunk associated with this switch or over the banks of a special coin control selector.

4.1 Coin Collect

When the operator desires to collect the coins deposited, the coin control equipment grounds lead CO, connects +110V D.C. to lead CC, and, when required, connects a collect tone to lead CT. Relay N operates from ground on lead CO, grounds lead ALM. GRD., short circuits the calling line and connects it to lead CC, and connects lead CT to the +TRK lead. The 110V D.C. over lead CC causes the coin box to collect the coins, and, when the coins have been disposed, the coin control equipment removes +110V from the calling line, removes tone from lead CT, and opens N. When N restores, the calling subscriber is again connected to E.

4.2 Coin Refund

When the operator desires to refund the coins deposited, the coin control equipment operates as described in Section 4.1 except that -110V D.C. is connected to lead CC.

5. Disconnect Supervision (Operated: Relays A, B, D, E, F, K, and P)

When the calling party disconnects, relay E restores and releases K. Relay K restores, disconnects capacitors A and Al, and reverses the battery over the trunk to give the operator disconnect supervision.

SHEET	3	TOTAL	3
AUTOMATIC ELECTRIC COMPANY NORTH LAKE, ILL., U.S.A.			
INDEX	A	DATE:	4

6. Recall by Operator (Operated: Relays A, B, D, F, and P)

The operator may recall the calling party by connecting generator ground to lead +TRK and generator battery to lead -TRK closing G. Relay G operates and closes H. Relay H transfers the calling line to leads DIR. GEN. and GEN. GRD. to signal the calling subscriber. When the operator removes the generator current from the trunk, relay G restores and releases H. Relay H transfers the calling line to E to remove generator current from the line. When the call is answered, relays E and K reoperate.

7. Release (Operated: Relays A, B, D, F, and P)

When the operator disconnects after receiving disconnect supervision, relay A restores and opens B. Relay B restores, releases D, F, and P, closes ground to lead PC to operate a peg count register, and removes ground from lead C to allow the preceding equipment to release. Relay D disconnects A from the trunk and removes ground from lead R.M. ST. to stop the ringing equipment. Relay P reconnects C to lead C to make this trunk available for other calls. Relay F restores, closes lead ATB, and opens lead PC to release the peg count meter.

8. Test Jacks

TEST JACK springs 1 and 2 provide means of seizing this trunk with a hand test telephone for test purposes.

TEST JACK springs 3 and 4 and the BUSY KEY provide means for making this trunk busy.

(13) WES
(15) LME:kf